DPW SITE PLAN REVIEW CHECKLIST

Development: _____ **Submittal Date:** _____

Address: _____ **Checked By:** _____

General

This plan checklist is applicable to projects submitting for a Town of North Reading Storm Water Management permit
Five (5) hardcopy and one (1) digital copy (CAD & PDF) of the proposed activity plans shall be submitted to the Building Inspector for his/ her review as well as review by other Town Departments, Boards & Commissions.
Minimum sheet size shall be 24" x 36" unless otherwise approved prior to submission
Set shall be comprised of separate sheets as listed below unless otherwise approved by the Town Engineer at the pre-application session
All plans shall be stamped by Commonwealth of Massachusetts-registered Professional Engineer, Professional Land Surveyor, and/or Professional Landscape Architect, as appropriate
All plans oriented so that north arrow points to top of sheet
All plans shall be shown at 1" = 40' or less and shall show a graphical scale
All plans shall have a title block comprised of the following:

- Project Title
- Sheet Title
- Sheet Number
- Registrant Stamp (PE, PLS, LA)
- Engineer's name, address
- Scale
- Plan Issue Date
- Plan revision Dates(s)
- Street address(s) of the project area parcels.

1. Cover Sheet

Title Block

- Project name/title
- Street number and/or lot number Assessor's map and parcel number(s)
- Names and addresses of property owner, applicant, engineer, developer, architect and landscape architect
- Revision Date Block

Zoning District
Zoning Requirements Table-"Required vs. Provided"

- Lot Size
- Lot Frontage
- Side Yard Setback
- Front Yard Setback
- Rear yard Setback
- Building Height

- Lot Coverage
- Parking Spaces – total #, # compact, # handicap, parking space sizes

Parking Lot Setbacks
Locus Map (Show all roads and available building information within 1000 feet)
Plan Index with latest revision date of each plan

2. **Legend, Abbreviations, and General Notes**

Legends
General Symbols
Abbreviations
General Notes
Construction Notes
Utility Notes

3. **Site Survey Plan** – Property Plan

Name of Surveyor
Date of survey
Property lines with bearings and distances
Monuments found/ set at all lot corners
Easements with bearings and distances suitable for registry filing
Name of all abutters
Street names
Data confirming that applicant has the legal right to use land shown on plan (easement, right of way, license, etc)

4. **Existing Condition Plan**

Name of Surveyor/ Engineer
Date of survey/ plan preparation
The survey plans shall be consistent with the Procedural and Technical Standards of 250 CMR 6.00 and shall:

- Tie boundary corners to street line bounds/ benchmarks & describe and locate bound/ benchmark on the plan.
- Cite reference boundary data taken directly from another reference plan with applicable registry recording number and title of said plan
- Find and/ or set monuments at all lot corners
- Establish property, street , boundary lines, etc with bearings and lengths
- Establish easements with bearings and lengths suitable for registry filing
- Reference elevations to NAVD 88
- Horizontal features to be the horizontal coordinate system of the Massachusetts State Plan Coordinate System tied into the North American Datum of 1983 (NAD 83)
- Name all abutters, parcel ID numbers, street numbers, etc, consistent with abutters list
- Show street, alley, park, public open space, etc names

Existing Buildings and Structures

- Area of Building
- Number of stories
- Principal use
- Setbacks from property lines
- Floor Elevations & Door Locations with sill elevations

Existing Topography-Contours at 2' intervals (1'contours or additional spot grades if site is flat) and rock or ledge outcrops
Existing site hydrology shall include a description and delineation of existing storm water conveyances, impoundments, and wetlands on or adjacent to the site or into which storm water flows. It shall identify all surface waters and wetlands within a half mile of the project that may receive stormwater runoff from the project and shall delineate the 100-year flood plains, if applicable
Overhead and underground utilities including but not limited to water, sewer, drainage, electric, telephone, cable TV, gas, septic systems, detention structures, drinking water and irrigation wells, underground storage tanks, etc (pipe types, sizes, lengths and slopes, rims and inverts, etc)
Adequate utility information outside the site to verify proposed utility connections
All existing public mains and appurtenances in the right of way frontage of the site at a minimum, including but not limited to water, sewer, drainage, gas, electric, etc
Existing 21E / contaminated site information
Existing parking/paved areas including pavement layout & type
All existing easements with bearings and distances suitable for registry filing
Existing pavement markings within site and on connecting roads
Existing features such as walls, curbing, landscaping trees, walks, fences, trees over 12" caliper, lighting, signs, loading areas, dumpster location etc.
Existing sign summary
Water protection district delineation including offsets and buffer zones
Areas of Critical Environmental Concern
NHESP mapped areas (Priority and Estimated Habitat of Rare Species

5. Demolition and Erosion Control Plan

Existing Conditions plan plus:

Property lines with bearings and distances
All existing easements with bearings and distances
Wetlands, floodplain, water protection district delineation including offsets and buffer zones
Monuments found/ set at all lot corners
Easements with bearings and distances suitable for registry filing
Name of all abutters
Street names
Benchmark locations (Based on NGVD – show year)
Existing Buildings and Structures to be removed/ demolished
Existing parking/paved areas to be removed/ demolished
Existing utilities to be removed/ demolished
All utility pipe types, sizes, and lengths

Existing features to be removed/ demolished such as walls, curbing, landscaping trees, walks, fences, trees over 6" caliper, lighting, signs, etc.
Proposed construction phase drainage infrastructure plan including but not limited to piping and natural watercourse profiles & cross-sections, retention / detention structures, drain manholes, headwalls, water quality BMPs, and erosion & sedimentation control features, etc
Hay bales or hay bale/silt fence combination
Anti-tracking BMP area at all construction entrances
Protect existing and proposed drainage structures with hay bales and or silt sacks
Delineate all stockpile areas
Provide safety fencing around stockpiles over 10' in height or otherwise restrict site access
All BMP erosion control measures shall be in place prior to demolition.
Erosion Control BMPs shall conform to the US EPA, MA DEP, Town of North Reading stormwater requirements

6. Construction/Layout Plan

Existing Condition Plan plus:

Proposed Buildings and Structures, Area of building or additions, Number of stories, Principal use
Setback dimensions from property lines
Proposed topography including but not limited to proposed contours at 2' intervals (1'contours or additional spot grades if site is flat)
Seasonal high groundwater elevation in each area to be altered and in each area to be used for storm water retention, detention, or infiltration to be made by a Massachusetts Approved Soil Evaluator
A drainage area map showing pre- and post- construction watershed boundaries, drainage areas, and storm water flow paths
Test pit locations and surface spot elevation
Proposed parking lots, sidewalks, islands, etc
Parking lot setbacks to property line
Parking lot grades shall not exceed 5% or be less than 0.5%
Parking spaces (delineated and dimensioned)
Handicap parking & access
Wheelchair ramps
Sidewalk & Pavement layout / material type
Curb / berm type (s) and limits
Granite curb at entrance to layout line
Lighted Signs
Proposed Sign Schedule
Pavement markings
All pavement markings and signs shall conform to MUTCD requirements
Loading areas, Dumpster areas, Walls, Fences & Landscape areas and Snow Storage Area
Critical dimensions including aisle widths, parking stall dimensions, curb radius etc...
Grading at entrances -show spot grades if required
Emergency Vehicle Access (WB-50 unless otherwise approved by Town Engineer)
Truck Access (WB-50 unless otherwise approved by Town Engineer)
All handicap parking, ramps, and access shall conform to ADA requirements

All perimeter erosion control measures shall be in place prior to construction.
Erosion Control shall conform to the US EPA, MA DEP, Town of North Reading Stormwater requirements

5. Grading and Drainage Plan

Existing Condition and Construction/ Layout Plans plus:

Existing and proposed site grading/ topography-Contours at 2' intervals (1'contours or additional spot grades if site is flat)
Proposed parking lots, sidewalks, islands, etc
Parking lot grades shall not exceed 5% or be less than 1.0 %
Floor elevations & door locations
Proposed drainage infrastructure plan including but not limited to piping and natural watercourse profiles & cross-sections, infiltration/ retention / detention structures, drain manholes, headwalls, roof recharge systems, flow direction, water quality BMPs, etc
Adequate information off site to verify proposed drain connections
Drainage system profiles including rim and invert elevations, material, types, sizes, lengths, utility crossings and slopes
Utility easements with bearings and distances suitable for registry filing
Delineate all stockpile areas
Provide safety fencing around stockpiles over 10' in height or otherwise restrict site access
For applications associated with residential or commercial/industrial subdivisions, include an overall development plan showing all construction activity and proposed grading for all project phases, and show the proposed building envelope within each house lot and the proposed grading, drainage, and stormwater disposal for each lot.

8. Utility Plan

Existing Condition and Construction/ Layout Plans plus:

All proposed utilities including but not limited to Water, Sewer, Drainage, Electric, Telephone, Cable, TV, Gas, Lighting, Septic Systems, Detention/ Retention/ Infiltration Structures, etc
Building finish floor elevations
Invert elevations at utility exits from building
Adequate utility information outside the site to verify proposed utility connections
All utility pipe types, sizes, lengths and slopes
All utility structure information including rim and invert elevations
Proposed Water & Sewer installations shall conform to MA DEP and Town of North Reading rules & regulations
All water services, hydrants, gates, shutoffs, tees
Utilities shall be underground if possible
All transformer locations

Required utility easements (minimum 20 foot width) with bearings and distances suitable for registry filing
Sewer profile showing all utility crossings

9. Landscape Plan

Town departments, boards & commissions, such as the Community Planning Commission, Conservation Commission, etc, have requirements for landscaping as part of the project submittals. These plans generally address landscaping after construction is complete. These post construction landscape plans will be incorporated into the Operation & Maintenance (O & M) plan requirements for a Storm Water Management Permit application.

The landscape plan for a Storm Water Management Permit must also address site landscaping & ground cover before & during earth disturbing activities / construction. This landscape plan will be incorporated into the Erosion & Sediment Control Plan. Specific requirements can be found in the Storm Water Management Plan Rules & Regulations, Appendix D, Erosion and Sediment Control Plan.

10. Detail Sheets / Typical Details

Pavement / Sidewalk/ Curb/ Berm/ Driveway Section Detail
Wheelchair Ramp Detail
Concrete Pad Detail
Catch Basin Detail
Drainage Manhole Detail
Sewer Manhole Detail
Water/Sewer/ Drain Trench Details-hydrants/ valves/ services/ thrust blocks/joint restraints/ etc
Water/Sewer/ Drain Details
Detention Basin Outlet Structure Control Detail
Infiltration Facility Outlet Structure Control Detail
Miscellaneous Detention Basin Details
Anti Seepage Collar Detail
Flared End Detail
Rip Rap Detail
Hay bale/Silt Fence/ Catch Basin Silt Barrier Detail
Light Pole Foundation and Conduit Detail
Retaining Wall Details
Traffic & Safety Details
Sign Details
Fence Detail
Flowable Fill Trench
Pavement Marking Details